

A Paper Read before the Hunterian Society

AT A DISCUSSION UPON THE

PRESENT METHODS OF TREATING

TUBERCULOSIS

SECTION 5

THE SURGICAL ASPECT

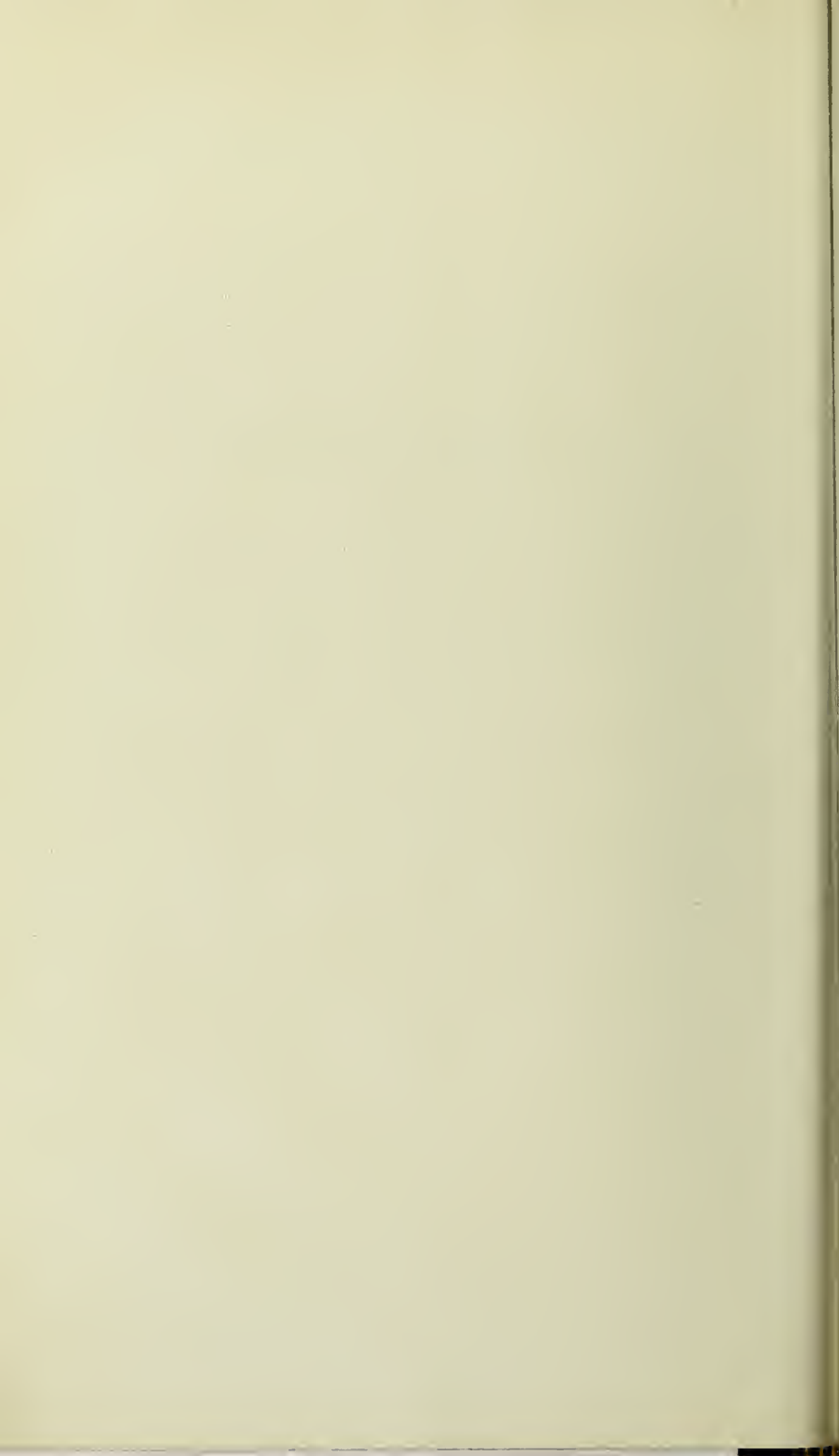
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GENTLEMEN,

It is an honour and pleasure to me to open this discussion on "The Treatment of Surgical Tubercular Disease."

Any two surgeons discussing the subject would probably agree on the general principles of treatment, viz., efficient treatment of the local disease and the adoption of general hygienic measures, such as the open air treatment, a pure climate and good food.

General  
agreement.

But when it comes to the point of carrying these general principles into practice wide differences prevail. The one is for promptitude in the local treatment and delay for the climatic and open air treatment; the other is for prompt hygienic and climatic treatment, and delay if possible for any radical local measures. One surgeon who sees a case of early tuberculous glands will say, "These are tuberculous glands, they are a centre of danger, the disease from these glands may at any moment spread to the lungs, brain, or some other part of the body; they must be removed at once—if possible, to-morrow."

Difference  
in details.

Another will say, "Go at once to the

seaside, keep the child out of doors, and if no improvement takes place we must consider the question of removal ;” even in this last line of treatment there are various degrees—one will keep the patient at the sea or in the country for a few weeks only, before deciding the question of operation ; another will wait if possible for one or two years. Of course the varying conditions of different patients will largely influence the difference in advice, but in spite of this, the fact remains that one surgeon looks chiefly at the local trouble and the other at the general health.

This discussion is on “ The Treatment of Surgical Tubercular Disease,” and bearing on the question as to whether general or local treatment is the more urgent and important, I should like to express my opinion that Surgical Tuberculosis is no more a local disease than syphilis is. I believe that it is a blood disease with local manifestations, and that the patient after a year or more acquires immunity, the length of time required to get this immunity varying with the susceptibility of the patient and the conditions under which he is placed.

Not a local  
disease.

Immunity.

Treatment  
following this  
opinion.

Whether correct or not this view of the nature and course of the disease guides my treatment. I try to get the patient into a

good general condition before attempting any radical local measures for the removal of the disease. That is provided there is no breaking down or suppuration locally, which would of course be dealt with.

I should like, as bearing on this point, to refer you to a paper which no doubt many have read, published by Mr. Tubby in the *British Medical Journal* of February 21. It is I think a most important and valuable paper.

Tubby.

Briefly, 218 patients suffering from Surgical Tuberculosis were admitted into four children's hospitals in London in 1901. The average stay in hospital was 41 days; the average number of operations per patient was  $2\frac{1}{4}$ , i.e., an average of an operation per child every 18 days.

These are depressing figures—the treatment has been almost entirely local, there has been no time for anything but local treatment, and the result one-third reputed cures is unsatisfactory.

In the Sea-bathing Hospital for ten years from 1888, 4670 patients were admitted with the following results:—

	Per cent.
Cured . . . . .	30
Benefited . . . . .	60
Unbenefited . . . . .	6
Died . . . . .	1·17
Operations . . . . .	52

Average stay about four months, *i.e.*, half an operation per patient, instead of  $2\frac{1}{4}$  as in London, or an operation per patient every nine months instead of every eighteen days.

R.S.B.H.

The Sea-bathing Hospital is unable for want of funds to take in patients free, and its weekly demand of 12s. for adults and 8s. for children must seriously diminish its usefulness. In fact there is little provision in this country for the poor when suffering from Surgical Tuberculosis.

Essentials.

The essentials of treatment for surgical tuberculosis are Time, Rest, Food and Fresh Air.

Time.

*Time*.—Certainly among the poor sufficient time is not generally given, and the treatment is too rapid and radical.

The well-to-do classes give more time, trust more to expectant treatment, and gain a far better result. The fact that a long time, from one to four years is required, for the cure of surgical tuberculosis, is not known by the Public, nor is it always sufficiently appreciated by the Medical Profession. Take for example a case of fairly early tuberculous glands. It is not sufficient to remove those glands and to send the child for a month or two to the seaside, and then the child being apparently well to let it return to its home in London, or perhaps

go back to school. The child should be kept under the best conditions of climate and out-of-door life for at least a year, and perhaps longer.

Or take an early case of joint disease, the symptoms may subside under good treatment and conditions in two or three months, but it is not safe to use the joint for at least a year.

Time and continued treatment will in the vast majority of cases bring about a good result in the end, but it is of no use trying to hurry surgical tubercular disease. It will run its own course and take its own time.

Do not hurry  
the disease.

Repeated operations do, I believe, nothing but harm, and unless there is some pressing reason for interference the patient should be given time before the local disease is attacked.

*Rest* is the second essential.

Rest.

Rest of body, rest of mind, and local rest.

*Rest of body* should vary with the stage of the disease and also of course with the part affected. In the early stage it should be complete for a limited time: the patient is ordered the open air treatment, he is not strong enough to walk or sit about all day, he should according to his disease and its stage, either lie in a room with the windows wide open, or on a couch in the open air, or

what is still better be out all day in a lying down carriage.

*Rest of Mind.*—The little child should not be kept in a constant state of excitement by the anxious efforts of the relatives to amuse him, the older child should not be pressed to do some lessons, nor should the adult be worried by letters and news from his office.

*Local Rest.*—Rest for the seat of the disease is too obvious to need remark. I would only say that tuberculous glands in the neck require rest in the early stage quite as much as disease in any other part of the body, and that a case of early tuberculous glands should be kept lying down.

Fresh air.

*Fresh Air.*—There is no doubt that climate has a good deal to do with the progress and cure, or otherwise, of tubercular disease. Sea air is, I believe, the best, and is probably fresher, drier and purer than is land air.

Although some tubercular cases do well in the country, the great majority seem to do better at the seaside. I believe the reason why the Isle of Thanet is so good for these patients is that being practically a small Island, winds from at least three quarters are sea breezes. Having also but little vegetation in the way of trees, and having only a thin soil on top of chalk it is



very dry. It also takes the lead in sunshine.

There is no doubt but that the higher parts of Switzerland are excellent in the winter owing to their dryness and large amount of sunshine. Switzerland.

The patient should be in a picked climate throughout the year and not merely in the summer months. Patients are frequently sent away for the summer and go home for the winter, but it is the winter which is especially the dangerous time, and relapses or extension of the disease are most common at the end of the long winter, viz., in the early spring. Importance of good climate for winter.

*Food.*—It is, I think, generally agreed that the diet should be generous, and should contain a liberal proportion of animal food. Children suffering from surgical tubercular disease in the earlier stages are generally ill-nourished, with little appetite, and the question of diet presents difficulties. My impression is that the children of the well-to-do classes suffering from the disease are stuffed too much and too often; and that this frequent and over-feeding accounts for a good deal of the gastric catarrh and disturbances of the stomach and bowels from which these cases undoubtedly very frequently suffer. The milk question wants Food.

consideration—one often finds a child taking in addition to its ordinary solid diet as much as a quart of milk a day—the greater part of this milk passing through the bowels undigested in the form of big whitish offensive stools. A mild form of alcohol such as beer or light wine is often useful.

The skin.

Considerable importance should be attached to the maintenance of the functions of the skin. This is often much neglected, and in hospitals it is difficult to see how it can be well kept ; nurses have not the time necessary to attend to the skin. I have many times seen the body of an old tuberculous case which has been rested in splints covered with dead cast epithelium. In all lying cases the nurse should gently rub the skin daily, either with or without oil for half an hour.

Local.

As regards local treatment I will take first that of glands in the neck.

Many of these can be cured if taken in hand at once, but delay is fatal.

Early  
treatment.  
Glands.

The early treatment is as follows :—  
Smear the swollen glands with glycerine of belladonna, roll firmly round the neck as much Gamgee tissue as can be used without projecting beyond the chin ; cutting the tissue narrower under the chin than at the sides, bandage this with domette bandage

as firmly as the patient can comfortably allow, continuing the bandage in figure of eight round the head. This not only keeps the neck quiet but also exercises a gentle, uniform and painless pressure on the affected glands, the patient should be kept lying down, should be in a good climate and should be out of doors. This treatment should be immediate. To send a child with early tuberculous gland disease in the neck to the seaside, and then to let him run about and perhaps dig on the sands may benefit the child's health, but is not likely to do much good to the glands. These glands lying for the most part under the sterno-mastoid every movement of the head, even the effort of holding it steady causes muscular pressure on the glands. Rest is absolutely necessary, whether the belladonna does any good I do not know, but it may be of some use.

If the glands cannot be reduced by this treatment there comes only the question of removal. In the matter of removal three chief points present themselves for consideration, viz., when should the removal take place, to what extent should it be complete, and the method of removal.

*The best time for removal.*—Many surgeons are of opinion that the sooner the glands

Question of  
removal.  
When?

are taken away the better, their reason being that they believe the presence of the tuberculous glands may cause spread of the disease to the lungs or elsewhere, in fact, may set up general tuberculosis. My experience points the other way, and I believe that one is far more likely to get spread of the disease by operating early on a debilitated child, and still further reducing its strength by loss of blood, confinement to house, and so forth, than by waiting till the child has regained its strength.

Of course one may be forced to early active measures by breaking down glands which must be dealt with without delay. Even in this case it is well to make the operation as light as possible.

Extent of  
removal.

Next, the question as to extent of removal. Everyone will probably theoretically agree that this should be complete. Frequently, however, when more than one set of glands is involved, and the disease is affecting different parts of, and perhaps both sides of the neck, this complete removal is not practicable.

Local removal  
should be  
complete.

At any rate the local removal should be complete, if only the more superficial glands are taken away and the deep ones left behind the latter are sure to break down later on, entailing a second and more troublesome operation.

Generally one side of the neck can be cleared at one operation. It is better to repeat the operation than to do too much at one time.

When tuberculous glands are found in the arm-pit, this part should be cleared of all glands and cellular tissue. When I have removed only the diseased glands I have generally found that those left behind become infected and enlarged later on. The cicatricial tissue of the first operation then makes removal more difficult.

Arm-pit.

The method of removal is by dissection. Scooping or scraping is occasionally of some accessory assistance, but can rarely be relied upon to effectually clear out the disease. In the vast majority of cases scooping or scraping is quite useless. Excision of tuberculous glands is a safe and satisfactory operation with practically no mortality. I have performed this operation for more than thirty years, in cases numbering from 50 to 100 per annum. I have lost but one case, and that child was suffering from septic poisoning at the time of operation and tuberculous pus was burrowing deeply in the neck. I have given up for a number of years the longitudinal vertical incision along the anterior margin of the sterno-mastoid, the scar of this tends

Method of  
removal  
Dissection.  
Scooping.

No mortality.

Longitudinal  
incision.

to widen and to show badly. Make incisions following or parallel to the creases of the neck, this plan recommended by my brother Sir Frederick Treves, also by Professor Kocher of Berne, undoubtedly gives the best result, often the scar is practically invisible. Two or even three of these horizontal cuts show less than one long vertical one. For a big case I use incisions which are called Beatson's, viz., horizontal cuts above and below connecting vertical cut behind sterno-mastoid, and this flap thrown forwards.

Details of  
operation.

My endeavour is always to make the operation as slight as possible, and to avoid bleeding. With this view I make the incision as small as I reasonably can, dissect down to the surface of the glands, separating the sterno-mastoid if necessary. I then thoroughly clean the surface of the mass, as far round as I can, of all cellular tissue, till I have the yellowish-white capsule bare, by tilting the mass first one side and then another I can generally get about half the surface bare, then with the finger and blunt elevator I try to loosen the deeper half from its surrounding cellular tissue, then draw the gland mass towards the surface with hook or forceps and divide the adhesions as they come into view, and gradually in

this manner set the glands free. I always cut on the capsule and more superficially than the deepest part exposed. If the deep attachments are rigidly fixed I slice the gland mass off, and carefully scrape and clean the small bit of capsule left.

In the submaxillary region, for some reason or other, tuberculous glands are as a rule more moveable than elsewhere. For the superficial ones the best plan is to get the tips of the fingers behind or beneath the glands and to tilt them on to the lower jaw, the gland is kept by the fingers in this position and can generally be turned out through an incision on to gland without much dissection. The cut falls back out of sight under the jaw. Of course this cannot be done with the deeper glands, nor in those fixed by old adhesions. The worst part of the neck from which to remove glands is the lower part of the posterior triangle just above the collar bone. There is a troublesome network of veins in this situation, the glands often are found extending beneath the collar bone and close on to the pleura. Also after removal a cavity is left, which owing to the existence of the collar bone it is difficult to close by pressure.

Submaxillary  
region.

Base of poste-  
rior triangle.

For the avoidance of scars the sewing up



should be carefully done. I use ophthalmic needles and gossamer gut, and put in a good many sutures. The sutures should be removed on the fourth day.

The incision is dressed and covered, and padded with Gamgee tissue, which is also rolled round the neck, gentle pressure over the wound should be kept up by a firmly applied bandage with figure of eight over the head. The patient should lie in bed with the neck relaxed on the side operated on, and should vomit and feed on the operated side.

Removal of  
scars.

There is one small point which may fairly be brought into the treatment of surgical tuberculosis and that is the removal of scars. I have removed a number of these (excepting always keloid, which is best left alone) and always with a satisfactory result.